1145-M5-2297   **Samuel Coskey**, **Paul Ellis*** (`paulellis@paulellis.org`) and **Japheth Wood**. *Bulgarian Solitaire - Understanding combinatorial patterns through data collection, conjecture, and proof.*

Bulgarian Solitaire is an automaton disguised as a solitaire card game. There are some lovely patterns that uncover some insightful mathematics, and these can be uncovered through good old data collection. Small cases can easily be done by hand, but it is natural to move to computer modeling for larger ones. (Received September 25, 2018)